



U.S. Department
of Transportation
**Federal Highway
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

April 12, 2006

In Reply Refer To: HOTO-1

Mr. Ted Trepanier
State Traffic Engineer
Washington State Department of Transportation
P.O. Box 47344
Olympia, WA 98504-7344

Dear Mr. Trepanier:

Thank you for your March 14 letter requesting approval to experiment with fishhook-shaped arrows on lane-use control signs and pavement markings for roundabout approaches at eight locations in Washington State. Two of these experimentation locations will be existing roundabouts and six will be roundabouts that will be newly constructed.

Please note that the fishhook shaped arrows on signs and markings are the only two proposed features that require experimentation approval. The four other features listed on page 5 of your proposal (conventional traffic arrows within the circulating roadway, etc.) are all treatments that do not violate any provision of the current MUTCD.

We have reviewed your proposal and concur with it, with two exceptions:

1. It is important that the performance of the fishhook-shaped arrows at the six newly constructed roundabouts be adequately compared with the performance of comparable signs and markings with standard arrows at other newly constructed roundabouts. Your evaluation plan does mention that such a comparison of crash histories will be performed but the number of new roundabouts with standard signs and markings is not specified. It is necessary that at least 5 new roundabouts with standard signs and markings be included in the crash history comparisons.
2. Since it appears that a variety of markings treatments will be applied in addition to the use of fishhook arrows on markings and signs, your evaluation plan must be designed to isolate the effects of the use of fishhook arrows versus standard arrows from any effects that may be due to the addition or revision of non-experimental markings treatments, such as the conventional arrows in the circulating roadway, yield line placements, etc. It may be necessary to implement the fishhook arrows separately from all other treatments, evaluate the effects, and then implement other treatments.



Your experimentation request is approved for a period not to exceed 4 years. However, this approval is conditional, pending our receipt of a revised evaluation plan that adequately addresses these two issues. Please email your revised evaluation plan to Mr. Scott Wainwright of our staff at scott.wainwright@dot.gov.

For future reference purposes, we have assigned the following two official experimentation numbers and titles to your request: "2-590(Ex)—Fishhook Arrows on Roundabout Lane-Use Control Signs—Washington State DOT" and "3-189(Ex)—Fishhook Arrow Pavement Markings for Roundabouts—Washington State DOT." Please refer to both of these numbers in future correspondence. Although separate experimentation numbers have been assigned for the signs and markings elements of your experimentation, the use of fishhook arrows at roundabouts is considered a unified system and we ask that you submit consolidated reports that evaluate the signs and markings deployed as a system and evaluated versus standard lane-use control signs and markings.

Thank you for your interest in improving traffic safety through the use of innovative traffic control devices. We look forward to receiving your revised evaluation plan, semiannual progress reports, and final report. If we can be of further assistance on this matter, please contact Mr. Wainwright by email or on 202-366-0857.

Sincerely yours,

/s/ **Paul Pisano**
(for)

Regina S. McElroy
Director, Office of Transportation
Operations